

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING
NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).
- 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked-up "Raw Sequence Listing."
- 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- 7. Other: See attached error report.

Applicant Must Provide:

- An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
- A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (703) 308-4216

For CRF Submission Help, call (703) 308-4212

PatentIn Software Program Support

Technical Assistance.....703-287-0200

To Purchase PatentIn Software.....703-306-2600

PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR REPLY



STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/591,632 C
Source: 1F416
Date Processed by STIC: 2/7/06

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT
MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 4.4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

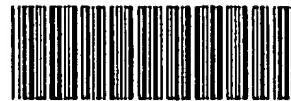
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

<u>ERROR DETECTED</u>	<u>SUGGESTED CORRECTION</u>	<u>SERIAL NUMBER:</u> <u>09/591,632C</u>
ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE		
1 <input checked="" type="checkbox"/> Wrapped Nucleic <input checked="" type="checkbox"/> Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."	
2 <input checked="" type="checkbox"/> Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.	
3 <input checked="" type="checkbox"/> Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.	
4 <input checked="" type="checkbox"/> Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	
5 <input checked="" type="checkbox"/> Variable Length	Sequence(s) _____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
6 <input checked="" type="checkbox"/> PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.	
7 <input checked="" type="checkbox"/> Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped	
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.	
8 <input checked="" type="checkbox"/> Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000	
9 <input checked="" type="checkbox"/> Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
10 <input checked="" type="checkbox"/> Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence	
11 <input checked="" type="checkbox"/> Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)	
12 <input checked="" type="checkbox"/> PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
13 <input checked="" type="checkbox"/> Misuse of n/Xaa	"n" can only represent a single <u>nucleotide</u> ; "Xaa" can only represent a single <u>amino acid</u>	



IFW16

RAW SEQUENCE LISTING DATE: 02/07/2006
 PATENT APPLICATION: US/09/591,632C TIME: 09:01:23

Input Set : A:\34978a.txt
 Output Set: N:\CRF4\02072006\I591632C.raw

less & exceeds
 ✓ 72 characters

3 <110> APPLICANT: Lindquist, et al.
 5 <120> TITLE OF INVENTION: RECOMBINANT PRION-LIKE GENES AND PROTEINS AND MATERIALS AND
 6 METHODS COMPRISING SAMB
 8 <130> FILE REFERENCE: 30554/34978A
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/591,632C
 C--> 10 <141> CURRENT FILING DATE: 2000-06-09
 10 <150> PRIOR APPLICATION NUMBER: US 09/591,632
 11 <151> PRIOR FILING DATE: 2000-06-09
 13 <150> PRIOR APPLICATION NUMBER: US 60/138,833
 14 <151> PRIOR FILING DATE: 1999-06-09
 16 <160> NUMBER OF SEQ ID NOS: 70
 18 <170> SOFTWARE: PatentIn version 3.3

(see item 2 on

Error

delete -
 these are summary
 not prior
 data. They
 are current data.

ERRORED SEQUENCES

429 <210> SEQ ID NO: 3
 430 <211> LENGTH: 1427 1426 (p.3)
 431 <212> TYPE: DNA
 432 <213> ORGANISM: *Saccharomyces cerevisiae*
 434 <220> FEATURE:
 435 <221> NAME/KEY: CDS
 436 <222> LOCATION: (182)..(1246)
 438 <400> SEQUENCE: 3

Does Not Comply
 Corrected Diskette Needed
 jp 1,3,5-6,7

439	ctcgaggttg	aaaagaatag	caaaaatctt	tcctttcaa	acagctcatt	tggaattgtt	60
441	tatagcactg	aattgaatcg	aagaggaata	aagatcccc	gtacgaactt	ctttattttt	120
443	agttttcat	ttttgttat	tagtcatatt	gttttaagct	gcaaattaag	ttgtacacca	180
445	a atg atg aat aac aac	ggc aac caa	gtg tcg aat ctc	tcc aat gcg	ctc	229	
446	Met Met Asn Asn Asn Gly	Asn Gln Val	Ser Asn Leu	Ser Asn Ala	Leu		
447	1	5	10	15			
449	cgt caa gta aac	ata gga aac	agg aac	agt aat aca	acc acc	gat caa	277
450	Arg Gln Val	Asn Ile	Gly Asn Arg	Asn Ser Asn	Thr Thr Asp	Gln	
451	20	25	30				
453	agt aat ata aat	ttt gaa ttt	tca aca	ggt gta aat	aat aat aat	aat	325
454	Ser Asn Ile	Asn Phe	Glu Phe	Ser Thr Gly	Val Asn Asn	Asn Asn Asn	
455	35	40	45				
457	aac aat agc	agt aat aac	aat aat gtt	caa aac aat	aac agc	ggc	373
458	Asn Asn Ser	Ser Ser Asn	Asn Asn Val	Gln Asn Asn	Asn Ser	Gly	
459	50	55	60				
461	cgc aat ggt	agc caa aat	aat gat aac	gag aat aat	atc aag aat	acc	421
462	Arg Asn Gly	Ser Gln Asn	Asn Asp Asn	Glu Asn Asn	Ile Lys	Asn Thr	
463	65	70	75	80			
465	tta gaa caa	cat cga	caa caa	caa cag	gca ttt	tcg gat atg	469

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 PATENT APPLICATION: US/09/591,632C TIME: 09:01:23

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 Output Set: N:\CRF4\02072006\1591632C.raw

466	Leu	Glu	Gln	His	Arg	Gln	Gln	Gln	Ala	Phe	Ser	Asp	Met	Ser	His	
467																517
469	gtg	gag	tat	tcc	aga	att	aca	aaa	ttt	caa	gaa	caa	cca	ctg	gag	
470	Val	Glu	Tyr	Ser	Arg	Ile	Thr	Lys	Phe	Phe	Gln	Gln	Pro	Leu	Glu	
471																565
473	gga	tat	acc	ttt	cac	agg	tct	gcg	cct	aat	gga	ttc	aaa	gtt		
474	Gly	Tyr	Thr	Leu	Phe	Ser	His	Arg	Ser	Ala	Pro	Asn	Gly	Phe	Lys	Val
475																613
477	gct	ata	gtt	cta	agt	gaa	ttt	cat	tat	aac	aca	atc	ttc	cta		
478	Ala	Ile	Val	Leu	Ser	Glu	Leu	Gly	Phe	His	Tyr	Asn	Thr	Ile	Phe	Leu
479																661
481	gat	ttc	aat	ctt	ggc	gaa	cat	agg	gcc	ccc	gaa	ttt	gtg	tct	gtg	aac
482	Asp	Phe	Asn	Leu	Gly	Glu	His	Arg	Ala	Pro	Glu	Phe	Val	Ser	Val	Asn
483	145															160
485	cct	aat	gca	aga	gtt	cca	gct	tta	atc	gat	cat	ggt	atg	gac	aac	ttg
486	Pro	Asn	Ala	Arg	Val	Pro	Ala	Leu	Ile	Asp	His	Gly	Met	Asp	Asn	Leu
487																709
489	tct	att	tgg	gaa	tca	ggg	gcg	att	tta	tta	cat	ttg	gta	aat	aaa	tat
490	Ser	Ile	Trp	Glu	Ser	Gly	Ala	Ile	Leu	Leu	His	Leu	Val	Asn	Lys	Tyr
491																757
493	tac	aaa	gag	act	ggt	aat	cca	tta	ctc	tgg	tcc	gat	gat	tta	gct	gac
494	Tyr	Lys	Glu	Thr	Gly	Asn	Pro	Leu	Leu	Trp	Ser	Asp	Asp	Leu	Ala	Asp
495																805
497	caa	tca	caa	atc	aac	gca	tgg	ttg	ttc	tca	acg	tca	ggg	cat	gcg	
498	Gln	Ser	Gln	Ile	Asn	Ala	Trp	Leu	Phe	Phe	Gln	Thr	Ser	Gly	His	Ala
499																853
501	cca	atg	att	gga	caa	gct	tta	'cat	ttc	aga	tac	ttc	cat	tca	caa	aag
502	Pro	Met	Ile	Gly	Gln	Ala	Leu	His	Phe	Arg	Tyr	Phe	His	Ser	Gln	Lys
503	225															240
505	ata	gca	agt	gct	gta	gaa	aga	tat	acg	gat	gag	gtt	aga	aga	gtt	tac
506	Ile	Ala	Ser	Ala	Val	Glu	Arg	Tyr	Thr	Asp	Glu	Val	Arg	Arg	Val	Tyr
507																949
509	ggt	gta	gtg	gag	atg	gcc	ttg	gct	gaa	cgt	aga	gaa	gcg	ctg	gtg	atg
510	Gly	Val	Val	Glu	Met	Ala	Leu	Ala	Glu	Arg	Arg	Glu	Ala	Leu	Val	Met
511																997
513	gaa	tta	gac	acg	gaa	aat	gcg	gct	gca	tac	tca	gct	ggt	aca	aca	cca
514	Glu	Leu	Asp	Thr	Glu	Asn	Ala	Ala	Tyr	Ser	Ala	Gly	Thr	Thr	Pro	
515																1045
517	atg	tca	caa	agt	cgt	ttc	ttt	gat	tat	ccc	gta	tgg	ctt	gta	gga	gtt
518	Met	Ser	Gln	Ser	Arg	Phe	Phe	Asp	Tyr	Pro	Val	Trp	Leu	Val	Gly	Asp
519	290															1093
521	aaa	tta	act	ata	gca	gat	ttg	gcc	ttt	gtc	cca	tgg	aat	aat	gtc	gtg
522	Lys	Leu	Thr	Ile	Ala	Asp	Leu	Ala	Phe	Val	Pro	Trp	Asn	Asn	Val	Val
523	305															1141
525	gat	aga	att	ggc	att	aat	atc	aaa	att	gaa	ttt	cca	gaa	gtt	tac	aaa
526	Asp	Arg	Ile	Gly	Ile	Asn	Ile	Lys	Ile	Glu	Phe	Pro	Glu	Val	Tyr	Lys
527																1189
529	tgg	acg	aag	cat	atg	atg	aga	aga	ccc	gcg	gtc	atc	aag	gca	ttg	cgt
530	Trp	Thr	Lys	His	Met	Met	Arg	Arg	Pro	Ala	Val	Ile	Lys	Ala	Leu	Arg
																1237

RAW SEQUENCE LISTING DATE: 02/07/2006
 PATENT APPLICATION: US/09/591,632C TIME: 09:01:23

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 Output Set: N:\CRF4\02072006\1591632C.raw

531	340	345	350				
533	ggta tga aggctgttt	aaaaacaaga	aagaaagaag	aaggaggaaa			
534	Gly	Gly					
537	agaagggtat aagggtatgt	atataggcag	acaaaaaggaa	aaattaatgt			
539	caaaaatgtc	ataagaatgt	ataatgttt	tgaaatttct			
E--> 541	gttaccccaa	ccacagaatt					
724	<210> SEQ ID NO: 11						
725	<211> LENGTH: 446	445					
726	<212> TYPE: DNA						
727	<213> ORGANISM: Artificial sequence						
729	<220> FEATURE:						
730	<223> OTHER INFORMATION: CUP1 promoter						
732	<400> SEQUENCE: 11						
733	ccattaccga	cattttggcg	ctatacgtgc	atatgttcat	gtatgtatct	gtataaaaaa	60
735	cacttttgc	ttattttcc	tcatatatgt	gtataggttt	atacggatga	tttaattatt	120
737	acttcacccac	ccttttatttc	aggctgatat	cttagccttg	ttactaggtta	gaaaaagaca	180
739	tttttgcgt	cagtcaactgt	caagagatc	ttttgcgtgc	atttcttct	gaagcaaaaa	240
741	gagcgtatcg	tctttccgc	tgaaccgttc	cagcaaaaaa	gaetaccaac	gcaatatgga	300
743	ttgtcagaat	catataaaaag	aagaagcaaa	taactccttg	tcttgatca	attgcattat	360
745	atatcttctt	gttagtgcaa	tatcatatag	aagtcatcg	aatagatatt	aagaaaaaca	420
E--> 747	aactgtacaa	tcaatcaatc	aatca				445
3712	<210> SEQ ID NO: 45						
3713	<211> LENGTH: 7239	7238 (pp 5-6)					
3714	<212> TYPE: DNA						
3715	<213> ORGANISM: Artificial sequence						
3717	<220> FEATURE:						
3718	<223> OTHER INFORMATION: Vector containing chimeric gene						
3720	<400> SEQUENCE: 45						
3721	gacgaaagg	cctcggtata	cgcctat	tataggttaa	tgtcatgata	ataatggttt	60
3723	ccttaggacgg	atcgcttgc	tgtacttac	acgcgcctcg	tatctttaa	tgatggata	120
3725	atttggaaat	ttactctgt	tttatttt	tttatgtttt	gtatggat	tttagaaagt	180
3727	aaataaagaa	ggtagaagag	ttacgaaatg	aagaaaaaaa	aataaaca	ggttaaaaaa	240
3729	atttcaacaa	aaacgtact	ttacatat	atttattaga	caagaaaagc	agattaaata	300
3731	gatatacatt	cgattaacga	taagaaaaat	gtaaaatcac	aggatttgc	tgtgtggct	360
3733	tctacacaga	caagatgaaa	caattcggca	ttaatacctg	agagcaggaa	gagcaagata	420
3735	aaaggtagta	tttggcgc	atccccctag	agtctttac	atctcggaa	aacaaaaact	480
3737	atttttctt	taatttctt	tttacttcc	tattttaat	ttatatattt	atattaaaaa	540
3739	atttaaatta	taatttattt	tatagcacgt	gatgaaaagg	accaggtgg	cactttcgg	600
3741	ggaaatgtc	gcggaaacccc	tatgtttt	ttttctaaa	tacattcaaa	tatgtatccg	660
3743	ctcatgagac	aataaccctg	ataaaatgtt	caataatatt	aaaaaggaa	gagtatgagt	720
3745	attcaacatt	tccgtgtgc	ccttattccc	tttttgcgg	cattttgcct	tctgtttt	780
3747	gctcaccag	aaacgtctgt	gaaagtaaaa	gatgctgaag	atcgttggg	tgcacgagt	840
3749	ggttacatcg	aactggatct	caacagcggt	aagatcctg	agatgttgc	ccccgaagaa	900
3751	cgttttccaa	tgatgagcac	ttttaaagtt	ctgtatgt	gwgccgtatt	atcccgatt	960
3753	gacgcggggc	aagagcaact	cggtcgcgc	atacactatt	ctcagaatga	tttgcgttgc	1020
3755	tactcaccag	tcacagaaaa	gcatcttacg	gatggcatga	cagtaagaga	attatgcagt	1080
3757	gctgccataa	ccatgagtga	taacactgcg	gccaacttac	ttctgacaac	gatcgagga	1140
3759	ccgaaggagc	taaccgcctt	tttgcacaac	atggggatc	atgtaactcg	cettgatcg	1200
3761	ttggaaacccg	agctgaatga	agccataacca	aacgacgagc	gtgacaccac	gatgcctgta	1260

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/591,632C

DATE: 02/07/2006
TIME: 09:01:23

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Output Set: N:\CRF4\02072006\1591632C.raw

3763	gcaatggcaa	caacgttgcg	caaactatta	actggcgaac	tacttactct	agtttcccg	1320
3765	caacaattaa	tagactggat	ggaggcggat	aaagttgcag	gaccacttct	gcgtcgccc	1380
3767	cttccggctg	gctggttat	tgctgataaa	tctggagccg	gtgagcgtgg	gtctcgccgt	1440
3769	atcattgcag	cactggggcc	agatggtaag	ccctcccgta	tcttagttat	ctacacgacg	1500
3771	gggagtcagg	caactatgga	tgaacgaaat	agacagatcg	ctgagatagg	tgccctcactg	1560
3773	attaaggcatt	ggtaactgtc	agaccaagg	tacttcatata	tacttttagat	tgatttaaaa	1620
3775	cttcattttt	aattttaaaag	gatcttaggt	aagatcctt	ttgataatct	catgacccaa	1680
3777	atcccttaac	gtgagtttc	gttccactg	gcttcagacc	ccgtagaaaa	gatcaaagg	1740
3779	tcttcttgag	atcccttttt	tctgcgcgt	atctgctgt	tgcaaaacaaa	aaaaccaccg	1800
3781	ctaccagccg	tggtttgtt	gcccgtca	gagctaccaa	cttttttcc	gaaggttaact	1860
3783	ggcttcagca	gagcgcagat	acccaaatact	gtccttctag	tgtagccgt	gttaggcac	1920
3785	cacttcaaga	actctgttagc	accgcctaca	tacctcgctc	tgttaatct	gttaccagt	1980
3787	gtctgctcca	gtggcgataa	gtcgtgtt	acggggtttgg	actcaagacg	atagttacccg	2040
3789	gataaggcgc	agcgtcgggg	ctgaacgggg	ggttcgtgc	cacagcccag	cttggagcga	2100
3791	acgacactaca	ccgaactgag	atacctacag	cgtagctat	gagaaagcgc	caegttccc	2160
3793	gaagggagaa	aggccggacag	gtatccggta	agccggcaggg	tcggaaacagg	agagcgcacg	2220
3795	agggagcttc	caggggaaa	cgccctggat	ctttatagtc	ctgtcggtt	tcgcaccc	2280
3797	tgacttgagc	gtcgatttt	gtgatgctcg	tcaggggggc	ggagccat	gaaaaacg	2340
3799	agcaacgcgg	ccttttacg	gttcctggcc	ttttgctgc	ctttgctca	catgttctt	2400
3801	cctgcgttat	ccccctgattc	tgtggataac	cgtattacg	cctttgagt	agctgatacc	2460
3803	gtctgcgcga	gccgaacgaa	cgagcgcagc	gagtcagtg	gctggaa	ggaagagcgc	2520
3805	ccaatacgc	aaccgcctc	ccccgcgcgt	tggccgatc	attaatgcag	ctggcagc	2580
3807	aggtttcccg	actgaaagc	gggcagttag	cgcaacgc	ttaatgtgag	ttacact	2640
3809	cattaggcac	cccaggctt	acactttatg	cttccggctc	gtatgtgt	tggaaattgt	2700
3811	agcggataac	aatttcacac	aggaaacagc	tatgaccat	attacgc	caaa	2760
3813	aaccctcact	aaagggaa	aaaagctgggt	acggggcccc	ccctcgaggt	cgacggtac	2820
3815	gataagctt	atatcgaatt	cccattaccg	acatttggc	gtatacgt	catatgtca	2880
3817	tgtatgtatc	tgtatttaaa	acacttttgc	attattttc	ctcatatat	tgtataggt	2940
3819	tatacggat	atthaattat	tacttca	cccttattt	caggctgata	tcttagc	3000
3821	gttactagtt	agaaaaagac	attttgc	tcaatgc	tcaagagat	ctttgctgg	3060
3823	cattttctt	agaacaaaa	agacgtatc	gtttttccg	ctgaaccgtt	ccagcaaaa	3120
3825	agactaccaa	cgcaatatgg	attgtcagaa	tcatataaaa	gagaagcaa	taactcctt	3180
3827	tcttgcgtat	attgcattat	aatatctt	tgttgcgt	atatacatata	gaagtcatcg	3240
3829	aaatagat	taagaaaaac	aaactgtaca	atcaatcaat	caatcaggat	ccatggata	3300
3831	ggataagtt	atctcagagg	ctgagtc	tttttctca	ggaaaccat	cgaaagctgt	3360
3833	tgcgaagtt	acatccgeag	cttcagtc	cccaatgac	gagccaaatgt	caactattga	3420
3835	atcattaaatt	caaaaaatcg	caggatacgt	catggacaa	cgtatgtgt	gtatgtac	3480
3837	ctcgcaagat	cgtgtgt	gtgggtt	atctttat	aaactttaa	tggcagact	3540
3839	taagggtt	tcccaa	acactggaaa	actagtttgc	ttagccacag	tgtatgacaca	3600
3841	ctcatcaaa	taaagggtt	ctaacagagg	gtttgacgt	gggactgt	ca	3660
3843	aagtgggtt	ggcggcggg	gccaatgt	gggtgtt	ggcctggct	ccttggctt	3720
3845	tcaattttt	aagtgcgt	acaatttcca	agtcaggg	caaggtca	gtcaagg	3780
3847	aggtcaagga	caaggcgt	gtcaagggtt	ttttactgt	ttggcgtt	tggcttcatc	3840
3849	tttcatgaat	tccaa	acaata	agtc	ttttactgt	ttggcgtt	3900
3851	ctttggagca	ctagtttca	tggcaagtt	ttttatgc	tccaaata	atcagaact	3960
3853	caacaatagt	caacagggtt	atataaccatc	ctatcaaa	ggtac	caagg	4020
3855	ttacaataat	caacagtacc	aagggtgg	cggtgg	taccaaca	aggacaatc	4080
3857	tgggtgtt	ttttctat	tggcctccat	ggctcaat	tacttaggt	gtggacaa	4140
3859	tcaatccaa	caacagcaat	acaatcaaca	aggccaa	aaccagc	aaataccagca	4200

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/591,632C

DATE: 02/07/2006

TIME: 09:01:23

Input Set : A:\34978a.txt

Output Set: N:\CRF4\02072006\1591632C.raw

group

9

3861	acaaggccaa aactatcagc accaacaaca	gggtcagcag cagcaacaag	gcacactccag	4260
3863	ttcatttca gcttggctt ccatggcaag	ttcttacactg ggcaataact	ccaattcaaa	4320
3865	ttcgagttat gggggccagc aacaggctaa	tgatgtatgtt agaccacaac	acaatggtca	4380
3867	acaacaatct aatqaatcag gaagaccgca	atacggcga aaccagaact	ccatggaca	4440
B--> 3869	gcacgaatcc (tttaatttt) ctggcaaccc	tttcaacag aacaataacg	gcaaccagaa	4500 4499
B--> 3871	ccgcgtacccg cggatggcta gcaaaggaga	agaactcttc actggagttg	tcccaattct	4560
B--> 3873	tgttgaatta gatgtgtatg ttaatggca	caaattttct gtcagttggag	agggtgaagg	4620
B--> 3875	tgtatcaaca tacgaaaaac ttacccttaa	atttatttgc actactggaa	aactacctgt	4680
B--> 3877	tccatggcca acacttgcac ctactttcac	ttatgggtt cagtctttt	caagataaccc	4740
B--> 3879	ggatcatatg aaacccgcatttacttttcaa	gagtgcattt cccgaaggaa	atgtacagga	4800
B--> 3881	aagaactata ttttcaaaag atgacgggaa	ctacaagaca cgtctgaag	tcaagtttga	4860
B--> 3883	agggtataacc ttgttataa gaatcgagg	aaaaggattt gatttttaag	aagatggaaa	4920
B--> 3885	cattcttggg cacaatttgg aatacaacta	taactcacac aatgtataca	tcatggcaga	4980
B--> 3887	caaacaaaag aatgaatca aagctaactt	caaattttaga cacaacattt	aagatggaaag	5040
B--> 3889	cgttcaacta gcagaccatt atcaacaaaaa	tactccaattt ggcgcatttgc	ctgtttttt	5100
B--> 3891	accagacaac cattacctgt ccacacaatc	tgccctttcg aaagatccc	acgaaaagag	5160
B--> 3893	agaccacatg gtccttcctt agtttgcac	agetgcgtggg	attacacatg	5220
B--> 3895	actatacaaaa tgagatctt aatgcgttcc	atagtgcgtt	gtattacaat	5280
B--> 3897	tcgttttaca acgtcgttac tggaaaaacc	ctggcggttac	ccaaacttaat	5340
B--> 3899	cacatcccccc ttgcgcage tggcgtaata	gigaagaggc	ccgcacccat	5400
B--> 3901	aacagttgcg cagctctaat ggcgaatggc	gcatgcgc	ctgtacgcgc	5460
B--> 3903	cggcggtgt ggtgttacg cgcagcgtt	ccgcgtacact	tgcgcgc	5520
B--> 3905	ctccttgc tttttccctt cccttctcg	ccacgttgc	cggttcccc	5580
B--> 3907	taaatcgcccc gtcctttta gggttcccgat	ttatgttgc	acggcaccc	5640
B--> 3909	aacttgatta ggggtatggg ttcacgtatgt	ggccatcgcc	ctgtatgcgc	5700
B--> 3911	ctttgacgtt gggttccacg ttctttaata	gtggactttt	gttccaaact	5760
B--> 3913	tcaaccctat ctcgttctat tttttgtt	tataaggat	tttgcgcatt	5820
B--> 3915	ggttaaaaaa tgagtcgtt taacaaaaat	ttaacgcgaa	ttttaacaaa	5880
B--> 3917	ttacaatttc ctgtatgcgtt attttctct	tacgcatttgc	tgccgtatcc	5940
B--> 3919	agggtataaa ctgtatataat taaaatttgc	ctcttatttgc	tgatgtttat	6000
B--> 3921	ttacttataa tacatgtttt tagtttgc	ggccgcattt	tctcaaatat	6060
B--> 3923	ctgttttctt gtaacgttca cccttctat	tagatccct	tcctttgc	6120
B--> 3925	ttccaacaat aataatgtca gatcttgcgt	agaccacatc	atccacgggtt	6180
B--> 3927	gacccaaatgc gtccttcctt tcatctaaac	ccacaccggg	tgcataatc	6240
B--> 3929	aacccatc tttccaccc atgttctttt	gagaataaa	gcccataaca	6300
B--> 3931	cgcttgc aatgtcaaca gtacccttgc	tatatttctt	agtagatagg	6360
B--> 3933	atgacaattt tgcataacatc aaaaggccctc	taggttccct	tgttacttctt	6420
B--> 3935	gcttcaacc gtcataacaat cctggccca	ccacaccgtt	tgcatttgc	6480
B--> 3937	attctgtat tctgtatatac cccgcagagt	actgcattt	gactgttata	6540
B--> 3939	caaatttttgc gtccttcgtt gtaatgttgc	ttgtacttgc	ggataatgc	6600
B--> 3941	taactgttgc ctccatggaa aataatgtca	agatatccac	atgttttttgc	6660
B--> 3943	ttttgggacc taatgttca actaacttca	gtatatttttgc	gggtgttacga	6720
B--> 3945	aagcacacaaa gtttgc ttttgc	tgatatttttgc	gcaacaggac	6780
B--> 3947	taggtatgtt agcagcactt ttcattat	tagtttgc	catgatttttgc	6840
B--> 3949	tgcagggtttt ttttgc agttgggtt	agaataactgg	gcaatttcat	6900
B--> 3951	cactacatat gcttatataat accaatactaa	gtctgttgc	cttccttcgt	6960
B--> 3953	gttcggat taccgaatca aaaaaatttgc	aaagaaaccg	aatcaaaaaa	7020
B--> 3955	aaaaaaatga tgaatttgc tggatgttgc	cacttcgtt	acaatctgt	7080
B--> 3957	ctgtatgcgc atagtttgc cagccccgac	acccgcac	acccgcgttgc	7140

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/591,632C

DATE: 02/07/2006

TIME: 09:01:23

Input Set : A:\34978a.txt

Output Set: N:\CRF4\02072006\I591632C.raw

B--> 3959 gggcttgctc gctccggca tccgcttaca gacaagctgt gaccgtctcc gggagctgca 7200
B--> 3961 tgtgtcagag gtttccacgg tcatcaccca aacgcgcga 7239

has
off

from sequence 39

09/591,632C 7

gta aca gct gct ggg att aca cat ggc atg gat gaa cta tac aaa tga 720
Val Thr Ala Ala Gly Ile Thr His Met Asp glu Leu Tyr Lys
225 230 235

240 *delete, since
no amino
acid
is shown*

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/591,632C

DATE: 02/07/2006

TIME: 09:01:24

Input Set : A:\34978a.txt

Output Set: N:\CRF4\02072006\I591632C.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:541 M:254 E: No. of Bases conflict, LENGTH:Input:1427 Counted:1426 SEQ:3
L:541 M:252 E: No. of Seq. differs, <211> LENGTH:Input:1427 Found:1426 SEQ:3
L:747 M:252 E: No. of Seq. differs, <211> LENGTH:Input:446 Found:445 SEQ:11
L:3593 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:39
L:3869 M:254 B: No. of Bases conflict, LENGTH:Input:4500 Counted:4499 SEQ:45
M:254 Repeated in SeqNo=45
L:3961 M:252 E: No. of Seq. differs, <211> LENGTH:Input:7239 Found:7238 SEQ:45